

CLAIMS

What is claimed is:

1. An optical interconnect comprising:
an input configured to receive light of a plurality of light wavelengths;
a plurality of holographic optical elements, each element configured to reflect one out of the plurality of light wavelengths and allowing others of the plurality of wavelengths to not be reflected;
a plurality of prisms, each of the plurality of prisms is configured to rotate received light at a different angle than any of the other prisms, wherein for each holographic optical element, one of the plurality of prisms is positioned to receive and rotate light reflected by that holographic element;
a plurality of beam splitters, each beam splitter positioned to receive light rotated by a respective one of the plurality of prisms and all the plurality of beam splitters directing light to an output of the optical interconnect.
2. The optical interconnect of claim 1 wherein the holographic elements are configured in a linear arrangement.
3. The optical interconnect of claim 2 wherein the beam splitters are configured in a linear arrangement.